TOYOTA

Toyota Motor North America, Inc. 1588 Woodridge Avenue Ann Arbor, Michigan 48105

October 29, 2020

Mr. Allen Lyons, Chief
Emissions Certification and Compliance Division
California Air Resources Board
9480 Telstar Avenue, Suite 4
El Monte, CA 91731

<u>Subject: Voluntary Emissions Recall Report for Customer Support Program (CSP) 20TE10</u>
<u>Certain 2013-2015 Model Year Prius and 2014-2017 Model Year Prius V Extension of Coverage to the Intelligent Power Module (IPM) and CARB Approval Letter #F-2020-085 dated October 1, 2020</u>

Toyota launched the subject campaign on October 16, 2020. Approximately 266,637 total units are affected by this campaign. This CSP provides extended warranty coverage as it applies to the IPM. The specific condition covered by this program is failure of the IPM located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this CSP must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this CSP. The Coverage will be offered for 15 years from the date-of-first-use (DOFU), regardless of mileage.

There are approximately 94,405 California vehicles affected by this program. This program does not affect OBD. This CSP is not involved California Department of Motor Vehicle (DMV) Tie-in Program due to due to it being a customer support program.

Pursuant to the requirements outlined in Part 85 (Subpart T) of 40 CFR, Toyota has issued the attached Emissions Defect Information Report (EDIR) #TOYOTA-DIR-20200714 on July 14, 2020. Technical Service Bulletin (TSB) # T-SB-0036-16 revised to update models and MYs on July 17, 2020 for this CSP and the applicable draft letters to customer, dealer for this CSP are also attached for your reference. If you have any further questions or need additional information regarding this matter, please contact Mr. Arvon Mitcham of my staff at (734) 995-5587 or arvon.mitcham@toyota.com.

Sincerely,

William Meschievitz

Will Mr

Group Manager

Powertrain Certification and Compliance

cc: Mr. Wong, Mr. Ho – Field Operations/Warranty Section S177 States: State of CT, DE, ME, MD, MA, NJ, NY, OR, PA, RI, VT, WA 1. Description of Potentially Affected Vehicles

<u>Make(s)</u>	<u>Model</u> <u>Year(s)</u>	<u>Model(s)</u>	<u>Test Group(s)</u>	Engine(s)	Potentially Affected Vehicles	<u>Potentially</u> <u>Affected</u> <u>California</u> <u>Vehicles</u>
Toyota	2013	Prius	DTYXV01.8HC3	2ZR-FXE	10	4
Toyota	2014	Prius	ETYXV01.8HC3	2ZR-FXE	60,559	18,591
Toyota	2014	Prius V	ETYXV01.8CCU	2ZR-FXE	10,313	2,784
Toyota	2015	Prius	FTYXV01.8HC3	2ZR-FXE	144,266	57,994
Toyota	2015	Prius V	FTYXV01.8CCU	2ZR-FXE	22,659	6,485
Toyota	2016	Prius V	GTYXV01.8PCU	2ZR-FXE	13,099	3,952
Toyota	2017	Prius V	HTYXV01.8P3U	2ZR-FXE	15,731	4,595

Number of the affected vehicles is approximately 266,637 total units and approximately 94,405 California units. For S177 States, the number of vehicles is: MA=5,646; ME=1,282; NJ=3,629; NY=9,957; VT=950

2. Description of Modification or Repair

If the condition is verified, an appropriate remedy (IPM, MG ECU, inverter current sensor, and/or inverter replacement) will be performed by authorized Toyota dealer under the terms of this CSP that covers 15 years from DOFU with no mileage limitation.

3. Owner's Name and Address

Toyota uses lists and addresses provided by IHS Markit and, when there is no IHS data available, Toyota will use internal company sales lists to notify owners of affected vehicles.

4. Eligibility for Repair

Any authorized Toyota dealer will perform an appropriate remedy (IPM, MG ECU, inverter current sensor, and/or inverter replacement) if the condition is verified.

5. Owner Procedure

The notification will include a recommendation that the owners contact any authorized Toyota dealer to schedule an appointment to have the remedy performed as soon as possible.

6. Performance of Repair

The repair will take approximately 3 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

7. Letter of Notification to Owners

Toyota began to notify owners on October 16, 2020. A sample of the owner notification letter has been included for your reference.

8. Parts Supply

Dealers are requested to only order parts for vehicles experiencing this condition only.

9. Repair Instructions

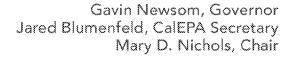
A copy of the TSB #T-SB-0036-16 Rev2 for CSP is attached.

10. Impact on Fuel Consumption, Drivability and Safety

This repair will not affect fuel economy, drivability and/or safety.

11. Completion Label

Completed vehicles will be tracked through the Toyota Technical Information System (TIS).





October 1, 2020

Reference No. F-2020-85

Mr. William Meschievitz, Group Manager Powertrain Certification and Compliance Toyota Motor North America, Inc. 1588 Woodridge Avenue Ann Arbor, Michigan 48105

Dear Mr. Meschievitz:

The California Air Resources Board (CARB) has received your letter regarding Toyota's proposed customer support program for the intelligent power module (IPM) warranty extension campaign number 20TE10, affecting 2013-2017 model year Prius and 2014-2017 model year Prius V vehicles (Test Groups: DTYXV01.8HC3, ETYXV01.8HC3, ETYXV01.8CCU, FTYXV01.8HC3, FTYXV01.8CCU, GTYXV01.8PCU, and HTYXV01.8P3U). Toyota determined that newly identified aggressive driving patterns can cause excessive thermal stress in specific transistors within the IPM of the vehicle's hybrid system, which can result in damage to those transistors over time. Toyota has recently submitted a safety related emissions recall for these test groups to update the hybrid system software to prevent the boosted voltage from becoming too high and to allow the vehicle to enter a fail-safe mode. This warranty extension covers failure of the IPM located inside the inverter assembly of the hybrid system if one or more of the following hybrid system diagnostic trouble codes (DTCs) P0A94, P324E, P3004, and/or P0A1A appears. If this occurs, various warning lamps on the instrument panel will illuminate and the vehicle will enter a fail safe driving mode. In order to qualify for this warranty extension, the affected vehicle must have completed safety recall 20TA10.

William Meschievitz

scheduled to begin in October 2020.

October 1, 2020

Page 2

Toyota will offer a warranty extension campaign to cover repairs for IPM failure associated with the DTCs mentioned above from 8 years/100,000 miles to 15 years/unlimited miles. The IPM and/or inverter assembly will be repaired or replaced free of charge. Retroactive coverage will be provided to owners who paid for eligible repairs within the extended warranty coverage limit. This warranty extension involves 94,405 California vehicles and is

CARB has reviewed Toyota' voluntary warranty extension plans, and owner notification letters and finds that they meet the requirements of the California Code of Regulations, Title 13, Sections 2111-2120. If you have any questions, please contact Mr. Jeffrey Wong, Manager of the Field Operations and Warranty Section, at (626) 575-7009 or jwong@arb.ca.gov.

Sincerely,

Aller Lyons, Chief

Emissions Certification and Compliance Division

cc: Jeffrey Wong, Manager

Field Operations/Warranty Section

Emissions Certification and Compliance Division

William Meschievitz October 1, 2020 Page 3

bcc: Sharon Lemieux, ECCD

Jerry Ho, ECCD

IUVP File

ECCD File

Ref #



Toyota Motor North America, Inc. 1588 Woodridge Avenue Ann Arbor, Michigan 48105

July 14, 2020

EDIR-VERR Coordinator Compliance Division U.S. Environmental Protection agency 2000 Traverwood Drive Ann Arbor, Michigan 48105

Re: Submission of Emissions Defect Information Report for Certain 2013-2015 Model Year (MY) Toyota Prius vehicles and 2014-2017MY Toyota Prius V vehicles Inverter

Pursuant to the requirements outlined in Part 85 (Subpart T) of 40CFR, we are providing an Emissions Defect Information Report (EDIR) on the model listed in paragraph 3 of this Defect Report. The subject vehicles were not involved in Safety Recall J0V because they were originally equipped with a version of the software, used to control the boost converter in the Intelligent Power Module (IPM) within the inverter assembly of the vehicle's hybrid system, that contains improved thermal management. Repeated driving under certain identified high-load driving patterns (e.g., from a stop, applying nearly full throttle and then gradually further accelerating to full throttle) could cause higher thermal stress in specific transistors in the IPM, resulting in damage to those transistors over time. On June 24, 2020, Toyota filed the attached Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall 20TA10. Attached are also Field Fixes #15-TF-37, 14-TF-48, 13-TF-60 submitted on October 30, 2018, and #18-TF-59, 17-TF-66, 16-TF-95 and 15-TF-48 submitted on June 24, 2020 regarding to this concern for our reference.

If you have any questions regarding this matter, please contact Mr. Arvon Mitcham of my staff at (734) 995-5587 or email: arvon.mitcham@toyota.com.

Sincerely,

William Meschievitz

Will Mr

Group Manager

Powertrain Certification and Compliance

cc: Mr. Allen Lyons Chief, California Air Resources Board – Emissions Certification and Compliance Division

Manufacturer's Corporate Name
 Toyota Motor Corporation
 1, Toyota-Cho, Toyota-City
 Aichi, 471-8571, JAPAN

Affiliated U.S. Importing Company Toyota Motor North America, Inc 6565 Headquarters Drive Plano, TX 75024, U.S.A

2. Description of the Defect

The subject vehicles were not involved in Safety Recall J0V because they were originally equipped with a version of the software, used to control the boost converter in the Intelligent Power Module (IPM) within the inverter assembly of the vehicle's hybrid system, that contains improved thermal management. Repeated driving under certain identified high-load driving patterns (e.g., from a stop, applying nearly full throttle and then gradually further accelerating to full throttle) could cause higher thermal stress in specific transistors in the IPM, resulting in damage to those transistors over time. This can lead to illumination of various warning lights and the display of a warning message on the instrument panel. In cases where a specific transistor fails in a certain way during a high-load driving condition, such as during hard acceleration, there is a possibility for an abnormally high voltage to be generated that could exceed a certain limit in the software and IPM circuit design causing the hybrid system to shut down instead of entering a failsafe driving mode that would provide reduced motive power and allow the vehicle to be driven for certain distances. In this condition, power steering and braking will not be affected. However, a hybrid system that shuts down without entering a failsafe mode could result in the vehicle losing motive power while driving at higher speeds, increasing the risk of a crash.

3. Description of Vehicles Potentially Affected

Make(s)	<u>Model</u> <u>Year(s)</u>	<u>Model(s)</u>	Test Group(s)	Engine(s)	Approximately Potentially Affected Vehicles
Toyota	2013	Prius	DTYXV01.8HC3	2ZR-FXE	10
Toyota	2014	Prius	ETYXV01.8HC3	2ZR-FXE	60,559
Toyota	2014	Prius V	ETYXV01.8CCU	2ZR-FXE	10,313
Toyota	2015	Prius	FTYXV01.8HC3	2ZR-FXE	144,266
Toyota	2015	Prius V	FTYXV01.8CCU	2ZR-FXE	22,659
Toyota	2016	Prius V	GTYXV01.8PCU	2ZR-FXE	13,099
Toyota	2017	Prius V	HTYXV01.8P3U	2ZR-FXE	15,731

4. <u>Number of the Affected Vehicles and the Address of the Plants at Which the Affected Vehicles Were</u> Produced

- (1) Number of affected vehicles Approximately 266,637 units
- (2) Addresses of the Manufacturing Plant
 Toyota Motor Corporation, Takaoka Plant
 1 Sanko, Honda-Cho, Toyota-City, Aichi, Japan

Toyota Motor Corporation Tsutsumi Plant 1, Umanokashira, Tsutsumi-Cho, Toyota-City, Aichi, Japan

TOYOTA-DIR-20200714

5. Evaluation of Emissions Impact and Description of Drivability Problems

Emissions Impact: Emissions Impact is not expected.

Drivability Impact: Drivability will be impacted if the vehicle enters a failsafe driving mode or

there is a hybrid system shut down due to this condition.

Fuel Economy Impact: Fuel Economy impact will be minimal in the case of a hybrid system

shutdown or in the case of the vehicle entering a failsafe driving mode

where power will be restricted.

6. Emission Data Related to the Defect

There is no emission data available at this time.

7. Anticipated Manufacturer Follow-up

Safety Recall Campaign 20TA10

Field Fixes #15-TF-37, 14-TF-48, 13-TF-60 submitted on October 30, 2018

#18-TF-59, 17-TF-66, 16-TF-95, 15-TF-48 submitted on June 24, 2020

Toyota Motor Sales, USA, Inc. 6565 Headquarters Drive Plano, TX 75024 (469) 292-4000

Original Publication Date: October 7, 2020

To: All Toyota Dealer Principals, General Managers, Service Managers, and Parts Managers

CUSTOMER SUPPORT PROGRAM 20TE10

Certain 2013-2015 Model Year Prius Certain 2014-2017 Model Year Prius V Extension of Coverage to the Intelligent Power Module (IPM)

Model / Years	Production Period	Approximate Total Vehicles
Prius / 2013 - 2015	Mid-March 2013 – Early November 2015	204,800
Prius V / 2014 -2017	Late June 2014 – Late November 2017	61,800

In our continuing efforts to ensure the best in customer satisfaction, Toyota is announcing a Customer Support Program to extend the coverage for repairs related to failure of the Intelligent Power Module (IPM). The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 (launched in late June 2020) performed.

Background

This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

Although the Intelligent Power Module (IPM) is covered by Toyota's New Vehicle Limited Warranty for 8 years or 100,000 miles (whichever comes first), we at Toyota care about the customers' ownership experience. Toyota is providing additional coverage for repairs related to the Intelligent Power Module (IPM).

<u>Note:</u> For California-certified Prius (NOT Prius V) vehicles sold, registered, and normally operated in California, Connecticut, Maine, Maryland, Massachusetts, New Jersey,), New York, Oregon, Rhode Island, and Vermont, the Toyota New Vehicles Limited Warranty coverage is 15 years from the date of first use, or 150,000 miles (whichever occurs first).

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The following information is provided to inform you and your staff of the program notification schedule and your degree of involvement.

<u>Customer Support Program Details</u>

This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program.*

• This coverage will be offered for 15 years with no mileage limitation from the date of first use (DOFU).

*This coverage is for work performed at an authorized Toyota dealer only. It is subject to the same terms and conditions set forth in the New Vehicle Limited Warranty Section of the Owner's Warranty Information booklet. For example, damage from abuse, an accident, theft and/or vandalism is not covered.

Covered Vehicles

There are approximately 266,600 vehicles covered by this Customer Support Program. Approximately 120 vehicles were distributed to Puerto Rico.

Owner Letter Mailing Date

Toyota will begin to notify owners in mid-October 2020 and will be mailed over several months. A sample of the owner notification letter has been included for your reference.

Customer Handling, Parts Ordering, and Remedy Procedures

Customer Contacts

Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or the Customer Support Program. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371) - Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

Salvage Title Vehicles

There is no New Vehicle Limited Warranty coverage or non-emission CSP coverage for vehicles that have been branded as salvage, total loss, true mileage unknown, or similar title under any state's law. Nonetheless, every attempt should be made to complete an open emission related CSP when circumstances permit, unless noted otherwise in the CSP dealer letter.

• This CSP *IS* emission related; therefore, vehicles branded as salvage, total loss, true mileage unknown, or similar title *ARE ELIGIBLE* for coverage under this CSP.

For complete details on this policy, refer to Toyota Warranty Policy $\underline{4.17}$, "What Is Not Covered by The Toyota New Vehicle Limited Warranty".

Customer Marketing

Direct marketing of this Customer Support Program is strictly prohibited pursuant to the Toyota Warranty Policy <u>5.22</u>, "Warranty Solicitation." Non-compliance of this policy may result in a claim debit.

Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Tania Saldana (859) 815-9968 in Toyota Corporate Communications. Please do not provide this number to customers. Please provide this contact only to media.

<u>Parts Ordering Process</u> - Non SET and GST Parts Ordering Process

It is possible that parts for this campaign are either required to be ordered in Campaign Part Order Request (CPOR) on Service Lane, or have been placed on Manual Allocation Control (MAC) due to potential limited part availability. Please check the CPOR/MAC report on Dealer Daily for the most up-to-date parts ordering information.

As this is a Customer Support Program, the condition *MUST* be verified by inspecting the vehicle. Therefore, dealers *SHOULD NOT* increase their stock of related repair parts. *Dealers are requested to only order parts for vehicles experiencing this condition only. <i>DO NOT ORDER FOR STOCK*. As always, if a customer experiences the condition described, dealers should conduct appropriate diagnosis and order the applicable parts.

Inverter component or assembly replacement MAY BE necessary based on the vehicle condition and diagnosis as per T-SB-0036-16. ONLY ORDER the necessary parts based on the vehicle's diagnosed condition. These parts can be found in T-SB-0036-16.

All Customer Support Program (CSP) parts are eligible for the Monthly Parts Return Program. Please refer to PANT Bulletin 2011–087 for campaign parts that are currently returnable under the Monthly Parts Return Program and for additional details.

Technician Training Requirements

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to currently hold at least one of the following certification levels:

- Hybrid Expert Technician
- Master Technician
- Master Diagnostic Technician

Always check which technicians can perform the repair by logging on to https://www.uotdealerreports.com. It is the dealership's responsibility to select technicians with the above certification level or greater to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

NOTE: Claims for repairs that were performed by non-qualified technicians are subject to debit.

Remedy Procedures

Technical instructions for this Customer Support Program can be found in T-SB-0036-16.

Parts Recovery Procedures

All parts replaced as part of this Customer Support Program must be turned over to the parts department until appropriate disposition is determined. The parts department must retain these parts until notification via the Parts Recovery System (PRS) is received indicating whether to ship or scrap the parts. These parts are utilized by various departments for defect analysis, quality control analysis, product evaluation, as well as other purposes.

To help minimize dealer storage challenges, Toyota recommends that dealers:

- File the campaign claim accurately and promptly. The time a dealer is required to hold parts is based on when the campaign claim is paid by Toyota.
- Monitor the Warranty Parts Recovery Notifications and Part Scrap Report regularly.

Refer to Warranty Policies 9.3 and 9.6 for additional details.

Warranty Reimbursement Procedures

Reimbursement Procedure

NOTE: If the vehicle is still under the New Vehicle Limited Warranty, submit the repair as a **Regular** warranty claim. If the vehicle is still under the New Vehicle Limited Warranty – Powertrain, an OFP must be input on the claim. The OFP to list on the claim should be: G9200-#####

NOTE

• Warranty Op Codes have 2 separate tables below. First table is for Prius only. Second table is for Prius V only.

Prius Vehicles ONLY

Desc	Description		
1.	Replace the IPM (Intelligent Power Module)		
2.	Replace the MG ECU		
3.	Replace the inverter current sensor sub-assembly		
4.	Replace the inverter assembly		

On Codes	Description (Reference Chart Above)				Dealer Flat Rate
Op Codes	1	2	3	4	Time
E10001	✓				2.9
E10002	✓	✓			2.9
E10003	✓	✓	✓		3.0
E10004				✓	2.0

• The cost of super long-life coolant will be reimbursed under sublet type "OF" under *ALL* remedy op codes for up to 1.2 liters per vehicle for a MAX of \$15.

Prius V Vehicles ONLY

Des	Description		
1.	Replace the IPM (Intelligent Power Module)		
2.	Replace the MG ECU		
3.	Replace the inverter current sensor sub-assembly		
4.	Replace the inverter assembly		

0 0	Description (Reference Chart Above)				
Op Codes	1	2	3	4	Flat Rate Time
E10101	✓				2.9
E10102	✓	4			2.9
E10103	✓	4	1		3.2
E10104				✓	1.6

• The cost of super long-life coolant will be reimbursed under sublet type "OF" under *ALL* remedy op codes for up to 1.2 liters per vehicle for a MAX of \$15.

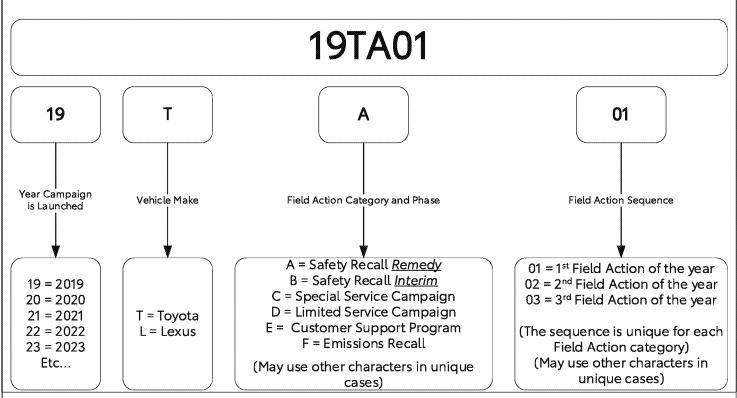
Claim Filing Accuracy and Correction Requests

It is the dealer's responsibility to file claims correctly for this Customer Support Program. This claim filing information is used by Toyota for various government reporting activities; therefore, claim filing accuracy is crucial. If it has been identified that a claim has been filed using an incorrect Op Code or a claim has been filed for an incorrect VIN, refer to Warranty Procedure Bulletin <u>PRO17–03</u> to correct the claim.

Customer Reimbursement

Reimbursement consideration instructions will be included in the owner letter.

Campaign Designation / Phase Decoder



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019 20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020 21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-bystep procedures required to implement this Customer Support Program.

Thank you for your cooperation. TOYOTA MOTOR SALES, U.S.A., INC.



CUSTOMER SUPPORT PROGRAM 201610

Certain 2013-2015 Model Year Prius

Certain 2014-2017 Model Year Prius V

Extension of Coverage to the Intelligent Power Module (IPM)

Frequently Asked Questions
Original Publication Date: October 7, 2020

BACKGROUND

In our continuing efforts to ensure the best in customer satisfaction, Toyota is announcing a Customer Support Program to extend the coverage for repairs related to failure of the Intelligent Power Module (IPM). The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 (launched in late June 2020) performed.

Q1: What is the condition?

A1: This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode.

The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

Q1a: What is the Hybrid System Inverter?

A1a: The hybrid system inverter converts high-voltage direct current (DC), stored in the HV battery, into high-voltage alternating current (AC) for the motor generator. It also converts AC into DC during regenerative braking for storage in the HV battery.

Q1b: Which Warning Lamps are illuminated on the instrument panel when the vehicle enters fail-safe driving mode?

A1b The various warning lamps shown below will illuminate on the instrument panel if the Intelligent Power Module (IPM) fails. The vehicle will also enter a fail-safe mode

Warning Lights Prius V Without Multi-Information Display (MID)		
>	Hybrid system warning	
	Slip Indicator	
CHECK	Check Engine Warning Light	
(Yellow Light)	Electronically Controlled Brake System Warning Light	

Warning Lights Prius V With Multi-Information Display (MID) and Prius		
A	Master Warning Light	
CHECK HYBRID SYSTEM	Hybrid system warning message	
CHECK PCS SYSTEM	PCS system warning message (if equipped)	
NOTE: If PCS equipped. CHECK HYBRID SYSTEM	Display switches	
53	Slip Indicator	
CHECK	Check Engine Warning Light	
(Yellow Light)	Electronically Controlled Brake System Warning Light	

Q2: What is Toyota going to do?

A2: Toyota will send an owner notification by first class mail starting in mid-October 2020, advising owners of this Customer Support Program.

If the owner experiences the Warning Lights and Warning Messages (shown above) and the vehicle enters Fail-Safe Driving Mode, he/she should contact his/her local authorized Toyota dealership for diagnosis and repair. Safety Recall 20TA10 must first be completed on the vehicle before this Customer Support Program is performed (if applicable). If the condition is covered by the terms of this Customer Support Program, an appropriate remedy will be performed at no charge to the vehicle's owner. This Customer Support Program covers failure of the IPM and other internal inverter components potentially damaged by IPM failure. Please see your local authorized Toyota dealer for additional details.

Q3: Which and how many vehicles are covered by this Customer Support Program?

A3: There are approximately 266,600 vehicles covered by this Customer Support Program. Approximately 120 vehicles were distributed to Puerto Rico.

Model Name	Model Year	Production Period
Prius	2013 - 2015	Mid-March 2013 – Early November 2015
Prius V	2014 - 2017	Late June 2014 – Late November 2017

Q4: What are the details of this program?

A4: This Customer Support Program provides coverage as it applies to failure of the Intelligent Power Module (IPM). The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program.

• The coverage will be offered for 15 years with no mileage limitation from the date of first use (DOFU).

This coverage is for work performed at an authorized Toyota dealer only. It is subject to the same terms and conditions set forth in the New Vehicle Limited Warranty Section of the Owner's Warranty Information booklet. For example, damage from abuse, an accident, theft and/or vandalism is not covered.

- Q5: Which part(s) are covered by this Customer Support Program?
- A5: This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A. If any of these DTCs are present, this Customer Support Program covers failure of the IPM and other internal inverter components potentially damaged by IPM failure.
- Q6: What should an owner do if experiencing this condition?
- A6: If an owner thinks that he/she has experienced the condition described in this Customer Support Program, a local Toyota dealer should be contacted for appropriate diagnosis and repair. If the condition is verified as being in accordance with the terms of the program, the repair will be performed *FREE OF CHARGE* to the owner.
 - Q6a: What if the diagnosis is performed and my vehicle is not covered by the Customer Support Program?
 - A6a: Please be aware that, if the condition is not covered by this Customer Support Program, you may be responsible for the initial diagnostic fees and any other repairs you may decide to have performed. Any authorized Toyota Dealership can determine if a condition is covered by this Customer Support Program.
- Q7: What if the dealer performs diagnosis and determines that the vehicle does not have the conditions covered by this Customer Support Program?
- A7: The warning lights and stored hybrid system DTCs can be triggered due to conditions detected not specific to the inverter assembly and its internal components. These additional conditions may require diagnosis or repairs not specifically covered by this Customer Support Program. Please be aware that if the condition does not relate to the DTCs or warning lights, vehicle owners may be responsible for the initial diagnostic fees and any other repairs they decide to have performed. Any authorized Toyota Dealership can determine if a condition is covered by this Customer Support Program.
- Q8: What if an owner HAS NOT experienced this condition but would like to have the repair completed?
- A8: This Customer Support Program only applies to vehicles that have exhibited the condition described above. If an owner has not experienced the condition, he/she is asked to tear off the sheet included in the owner letter and insert it into the Owner's Warranty Information Booklet for future reference.
- Q9: How long will the repair take?
- A9: Replacement of the IPM and other internal inverter components potentially damaged by IPM failure will take approximately 3 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.
- Q10: What if I previously paid for repairs related to this Customer Support Program?
- A10: Reimbursement consideration instructions will be provided in the owner letter.

Q11: How does Toyota obtain my mailing information?

A11: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information, based upon the DMV records. Please make sure your registration or title information is correct.

Q12: What if I have additional questions or concerns?

A12: If you have additional questions or concerns, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

Toyota Motor Sales, USA, Inc. 6565 Headquarters Drive Plano, TX 75024

CUSTOMER SUPPORT PROGRAM NOTIFICATION

[VIN]

Dear Toyota Owner:

At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continual efforts to ensure customer satisfaction, Toyota would like to advise you of a voluntary Customer Support Program that has been initiated for your vehicle.

Toyota has received some reports where the Intelligent Power Module (IRM) located inside the inverter assembly of the hybrid system may fail.

This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 201A10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

<u>Coverage</u>

15 years from the date of first use (DOFU) with no mileage limitation.

If this condition occurs, various warning lamps shown below will illuminate on the instrument panel if the Intelligent Power Module (IPM) fails. The vehicle will also enter a fail-safe driving mode.

Prius V With	arning Lights nout Multi-Information	Prius V With	Warning Lights Multi-Information Display (MID) and
D	isplay (MID)		Prius
	Hybrid system warning	A	Master Warning Light
	Slip Indicator	CHECK HYBRID SYSTEN	Hybrid system warning message
CHECK	Check Engine Warning Light	GREEK PICS SYSTEM	PCS system warning message (if equipped)
(Yellow Light)	Electronically Controlled Brake System Warning Light	NOTE: If PCS equipped. CHECK HYBRID SYSTEM	Display switches
			Slip Indicator
		CHECK	Check Engine Warning Light

What should you do?

Please tear off and insert the sheet at the bottom of the page into the back of your Owner's Manual for future reference. If you have not experienced the condition described in the Customer Support Program Details below, there is no action necessary at this time.

(Yellow Light)

If you have experienced this condition, please contact any authorized Toyota dealer and make arrangements for diagnosis and, if applicable, repair. The repair will take approximately 3 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

What if you have other questions?

Electronically Controlled Brake System Warning Light

- Refer to the Frequently Asked Questions sheet included with this letter.
- Your local Toyota dealer will also be more than happy to answer any of your questions.
- Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371) Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

If you would like to update your vehicle ownership or contact information, please visit https://www.toyota.com/recall/update-info-toyota. You will need your full 17-digit vehicle Identification Number (VIN) to input the new information.

What if you have previously paid for repairs to your vehicle for this specific condition?

If you have previously paid for repairs related to this condition, please mail a copy of your repair **details** (for example: a repair order), proof-of-payment, and ownership information to the following address for reimbursement consideration:

Toyota Customer Experience Center - TSR
Toyota Motor Sales, USA, Inc.
c/o Toyota Motor North America, Inc.
P O Box 259001 – SSC/CSP Reimbursements
Plano, Texas 75025-9001

Please refer to the attached Reimbursement Checklist for required documentation details.

We have sent this notice in the interest of your continued satisfaction with our products. We sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,

TOYOTA MOTOR SALES, U.S.A., INC.

Customer Support Program Details

This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

*.

 The Coverage will be offered for 15 years from the date of first use, regardless of mileage.

Please note that this coverage is for work performed at an authorized Toyota dealer only.

This coverage is subject to the same terms and conditions set forth in the New Vehicle Limited Warranty Section of the Owner's Warranty Information booklet. For example, damage from abuse, an accident, theft and/or vandalism is not covered.

*Please see your Toyota dealer for additional VIN details

Date of First Use



TOYOTA

CUSTOMER SUPPORT PROGRAM FREQUENTLY ASKED QUESTIONS

- Q1: Is this a recall?
- A1: No. This is not a recall. At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continual efforts to help ensure customer satisfaction, Toyota is advising you of this Customer Support Program.
- Q2: If my vehicle does not have this condition, do I need to make an appointment with my dealership?
- A2: No, you do not need to take your vehicle to a dealership unless your vehicle is exhibiting the condition described in this letter. If you have not experienced this condition, please tear off and insert the sheet from the bottom of the owner letter into the back of your owner's manual for future reference.
- Q3: Is the Customer Support Program coverage transferable if I sell my vehicle?
- A3: Yes, this Customer Support Program coverage is fully transferrable to subsequent vehicle owners for the condition and terms specified in the notification letter.
- Q4: What should I do if my vehicle has the condition described?
- A4: If you experience this condition, please contact any authorized Toyota dealer and make arrangements for diagnosis and, if applicable, repair.
- Q5: Which part(s) are covered by this Customer Support Program?
- A5: Refer to the owner letter to find the specific component(s) covered by this program.
- Q6: What if the diagnosis is performed and my vehicle is not covered by the Customer Support Program?
- A6: Please be aware that, if the condition is not covered by this Customer Support Program, you may be responsible for the initial diagnostic fees and any other repairs you may decide to have performed. Any authorized Toyota Dealership can determine if a condition is covered by this Customer Support Program.

TOYOTA

Toyota Motor Sales, USA, Inc. 6565 Headquarters Drive Plano, TX 75024

CUSTOMER SUPPORT PROGRAM NOTIFICATION

[VIN]

Dear Toyota Owner:

At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continual efforts to ensure customer satisfaction, Toyota would like to advise you of a voluntary Customer Support Program that has been initiated for your vehicle.

Toyota has received some reports where the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system may fail.

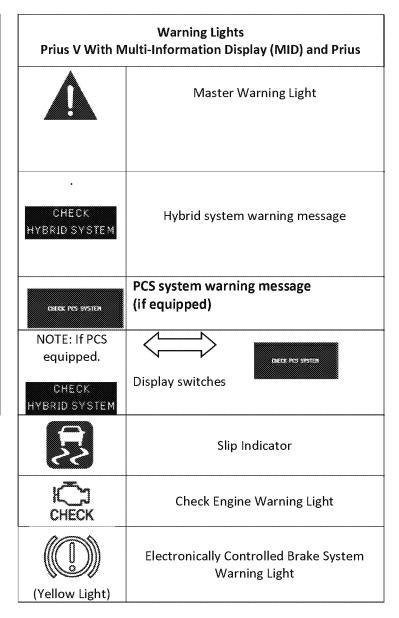
This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): POA94, P324E, P3004, and/or POA1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

Coverage

15 years from the date of first use (DOFU) with no mileage limitation.

If this condition occurs, various warning lamps shown below will illuminate on the instrument panel if the Intelligent Power Module (IPM) fails. The vehicle will also enter a fail-safe driving mode.

Warning Lights Prius V Without Multi-Information Display (MID)		
	Hybrid system warning	
	Slip Indicator	
Г CHECK	Check Engine Warning Light	
(Yellow Light)	Electronically Controlled Brake System Warning Light	



What should you do?

Please tear off and insert the sheet at the bottom of the page into the back of your Owner's Manual for future reference. If you have not experienced the condition described in the Customer Support Program Details below, there is no action necessary at this time.

If you have experienced this condition, please contact any authorized Toyota dealer and make arrangements for diagnosis and, if applicable, repair. The repair will take approximately 3 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

What if you have other questions?

- Refer to the Frequently Asked Questions sheet included with this letter.
- Your local Toyota dealer will also be more than happy to answer any of your questions.
- Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371) Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

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What if you have previously paid for repairs to your vehicle for this specific condition?

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P O Box 259001 – SSC/CSP Reimbursements
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Please refer to the attached Reimbursement Checklist for required documentation details.

We have sent this notice in the interest of your continued satisfaction with our products. We sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,

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This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

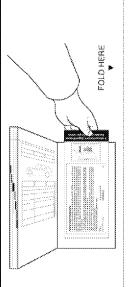
 The Coverage will be offered for 15 years from the date of first use, regardless of mileage.

Please note that this coverage is for work performed at an authorized Toyota dealer only.

This coverage is subject to the same terms and conditions set forth in the New Vehicle Limited Warranty Section of the Owner's Warranty Information booklet. For example, damage from abuse, an accident, theft and/or vandalism is not covered.

*Please see your Toyota dealer for additional details VIN#

Date of First Use





TOYOTA

CUSTOMER SUPPORT PROGRAM FREQUENTLY ASKED QUESTIONS

Q1: Is this a recall?

A1: No. This is not a recall. At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continual efforts to help ensure customer satisfaction, Toyota is advising you of this Customer Support Program.

Q2: If my vehicle does not have this condition, do I need to make an appointment with my dealership?

A2: No, you do not need to take your vehicle to a dealership unless your vehicle is exhibiting the condition described in this letter. If you have not experienced this condition, please tear off and insert the sheet from the bottom of the owner letter into the back of your owner's manual for future reference.

Q3: Is the Customer Support Program coverage transferable if I sell my vehicle?

A3: Yes, this Customer Support Program coverage is fully transferrable to subsequent vehicle owners for the condition and terms specified in the notification letter.

Q4: What should I do if my vehicle has the condition described?

A4: If you experience this condition, please contact any authorized Toyota dealer and make arrangements for diagnosis and, if applicable, repair.

Q5: Which part(s) are covered by this Customer Support Program?

A5: Refer to the owner letter to find the specific component(s) covered by this program.

Q6: What if the diagnosis is performed and my vehicle is not covered by the Customer Support Program?

A6: Please be aware that, if the condition is not covered by this Customer Support Program, you may be responsible for the initial diagnostic fees and any other repairs you may decide to have performed. Any authorized Toyota Dealership can determine if a condition is covered by this Customer Support Program.



CUSTOMER SUPPORT PROGRAM 2016:10

Certain 2013-2015 Model Year Prius
Certain 2014-2017 Model Year Prius V
Extension of Coverage to the Intelligent Power Module (IPM)

Frequently Asked Questions

Original Publication Date: September XX, 2020

BACKGROUND

In our continuing efforts to ensure the best in customer satisfaction, Toyota is announcing a Customer Support Program to extend the coverage for repairs related to failure of the Intelligent Power Module (IPM). The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 (launched in late June 2020) performed.

Q1: What is the condition?

A1: This Customer Support Program provides coverage as it applies to the Intelligent Power Module (IPM). The specific condition covered by this program is failure of the Intelligent Power Module (IPM) located inside the inverter assembly of the hybrid system. This condition is indicated by hybrid system diagnostic trouble codes (DTCs): P0A94, P324E, P3004, and/or P0A1A that your dealer can find by use of a special diagnostic tool. If one or more of these DTCs are detected, various warning lamps on the instrument panel will also illuminate and the vehicle will enter fail safe driving mode. The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program

Q1a: What is the Hybrid System Inverter?

A1a: The hybrid system inverter converts high-voltage direct current (DC), stored in the HV battery, into high-voltage alternating current (AC) for the motor generator. It also converts AC into DC during regenerative

braking for storage in the HV battery.

Q1b: Which Warning Lamps are illuminated on the instrument panel when the vehicle enters fail-safe driving mode?

A1b The various warning lamps shown below will illuminate on the instrument panel if the Intelligent Power Module (IPM) fails. The vehicle will also enter a fail-safe mode

Warning Lights Prius V Without Multi-Information Display (MID)		
	Hybrid system warning	
	Slip Indicator	
CHECK	Check Engine Warning Light	
(Yellow Light)	Electronically Controlled Brake System Warning Light	

Warning Lights Prius V With Multi-Information Display (MID) and Prius			
A	Master Warning Light		
CHECK HYBRID SYSTEM	Hybrid system warning message		
	PCS system warning message		
DHEK PES SYSTEM	(if equipped)		
NOTE: If PCS equipped.			
CHECK HYBRID SYSTEM	Display switches		
53	Slip Indicator		
KG CHECK	Check Engine Warning Light		
(Yellow Light)	Electronically Controlled Brake System Warning Light		

Q2: What is Toyota going to do?

A2: Toyota will send an owner notification by first class mail starting in mid-August 2020, advising owners of this Customer Support Program.

If the owner experiences the Warning Lights and Warning Messages (shown above) and the vehicle enters Fail-Safe Driving Mode, he/she should contact his/her local authorized Toyota dealership for diagnosis and repair. Safety Recall 20TA10 must first be completed on the vehicle before this Customer Support Program is performed (if applicable). If the condition is covered by the terms of this Customer Support Program, an appropriate remedy will be performed at no charge to the vehicle's owner. This Customer Support Program covers failure of the IPM and other internal inverter components potentially damaged by IPM failure. Please see your local authorized Toyota dealer for additional details.

Q3: Which and how many vehicles are covered by this Customer Support Program?

A3: There are approximately 266,600 vehicles covered by this Customer Support Program. Approximately 120 vehicles were distributed to Puerto Rico.

Model Name Model Year		Production Period
Prius 2013 - 2015		Mid-March 2013 – Early November 2015
Prius V	2014 - 2017	Late June 2014 – Late November 2017

Q4: What are the details of this program?

A4: This Customer Support Program provides coverage as it applies to failure of the Intelligent Power Module (IPM). <u>The vehicles covered under this Customer Support Program must first have Safety Recall 20TA10 performed</u>. If the condition is verified, an appropriate remedy will be performed under the terms of this Customer Support Program.

The coverage will be offered for 15 years with no mileage limitation from the date of first use (DOFU).

This coverage is for work performed at an authorized Toyota dealer only. It is subject to the same terms and conditions set forth in the New Vehicle Limited Warranty Section of the Owner's Warranty Information booklet. For example, damage from abuse, an accident, theft and/or vandalism is not covered.

Q5: Which part(s) are covered by this Customer Support Program?

A5: This condition is indicated by hybrid system diagnostic trouble codes (DTCs): POA94, P324E, P3004, and/or POA1A. If any of these DTCs are present, this Customer Support Program covers failure of the IPM and other internal inverter components potentially damaged by IPM failure.

Q6: What should an owner do if experiencing this condition?

A6: If an owner thinks that he/she has experienced the condition described in this Customer Support Program, a local Toyota dealer should be contacted for appropriate diagnosis and repair. If the condition is verified as being in accordance with the terms of the program, the repair will be performed *FREE OF CHARGE* to the owner.

Q6a: What if the diagnosis is performed and my vehicle is not covered by the Customer Support Program?

A6a: Please be aware that, if the condition is not covered by this Customer Support Program, you may be responsible for the initial diagnostic fees and any other repairs you may decide to have performed. Any authorized Toyota Dealership can determine if a condition is covered by this Customer Support Program.

Q7: What if the dealer performs diagnosis and determines that the vehicle does not have the conditions covered by this Customer Support Program?

A7: The warning lights and stored hybrid system DTCs can be triggered due to conditions detected not specific to the inverter assembly and its internal components. These additional conditions may require diagnosis or repairs not specifically covered by this Customer Support Program. Please be aware that if the condition does not relate to the DTCs or warning lights, vehicle owners may be responsible for the initial diagnostic fees and any other repairs they decide to have performed. Any authorized Toyota Dealership can determine if a condition is covered by this Customer Support Program.

Q8: What if an owner HAS NOT experienced this condition but would like to have the repair completed?

A8: This Customer Support Program only applies to vehicles that have exhibited the condition described above. If an owner has not experienced the condition, he/she is asked to tear off the sheet included in the owner letter and insert it into the Owner's Warranty Information Booklet for future reference.

Q9: How long will the repair take?

A9: Replacement of the IPM and other internal inverter components potentially damaged by IPM failure will take approximately 3 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q10: What if I previously paid for repairs related to this Customer Support Program?

A10: Reimbursement consideration instructions will be provided in the owner letter.

Q11: How does Toyota obtain my mailing information?

A11: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information, based upon the DMV records. Please make sure your registration or title information is correct.

Q12: What if I have additional questions or concerns?

A12: If you have additional questions or concerns, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

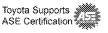


Service

Category Engine/Hybrid System

Section Hybrid/Battery Control System

Market USA



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012 - 2017	Prius V	
2010 - 2015	Prius	

REVISION NOTICE

July 17, 2020 Rev2:

 Applicability has been updated to include 2015 – 2017 model year Prius V and 2015 model year Prius vehicles.

January 31, 2019 Rev1:

. The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2010 – 2015 model year Prius and 2012 – 2017 model year Prius V vehicles may exhibit a MIL ON condition with Diagnostic Trouble Codes (DTCs) P0A94, P324E, P0A1A, and/or P3004, indicating a malfunction has occurred in the inverter assembly with converter. Follow the Repair Procedure in this bulletin to identify the specific components within the inverter assembly with converter that need to be replaced and address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL1602	R & R Inverter Assembly With Converter	2.0	2.0		
EL1603	EL1603 R & R IPM Transistor		G9200-#####	8A	73
EL1604	R & R IPM Transistor and MG ECU	2.9			

APPLICABLE WARRANTY

- This repair is covered under the Toyota Hybrid System Warranty. This warranty is in effect for 96 months or 100,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.
- For California specification Prius vehicles sold, registered, and operated in California, Arizona (2012 model year only), Connecticut, Maine, Maryland (staring with 2011 model year) Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Vermont, warranty is in effect for 180 months or 150,000 miles, whichever occurs first, from the vehicle's in-service date.

Parts Information

NOTE

- This section is for reference ONLY. The parts listed below are NOT all required for inverter assembly with converter repairs.
- Order the correct part number by entering the VIN number into the Electronic Parts Catalog (EPC).

PART NUMBER* ¹	PARTNAME	
G9200-##### (Order by VIN)	Inverter Assy, W/Converter	1*2
G920H-##### (Order by VIN)	Computer Sub-assy, MG Control W/Bracket	1*2
G920J-52010	Sensor Sub-assy, Inverter Current	1*2
G9208-47090	Wire Sub-assy, Inverter	1*2
04899-47021	Transistor Kit, Power Module Intelligent (IPM)	1*2
08826-00100	Seal Packing or Equivalent	1*2
00272-SLLC2	Super Long Life Coolant	1* ³
04899-47060	Plug Kit, Inverter Drain	1*3
90430-18008	Gasket	1* ³

^{*1} Part numbers are subject to change. Order the correct part number by inputting the VIN in the EPC.

^{*2} Refer to step 3 in this Service Bulletin to determine if the part is required.

^{*3} Required for ANY Repair Procedure in this Service Bulletin.

^{*4} NOT required. Available in case of breakage.

^{*5} Included in IPM Kit. Available if spare is needed.

^{*6} Used ONLY for IPM replacement. Part has shelf life of one year. Do NOT use if stored past one year.

Parts Information (continued)

PART NUMBER*1	PART NAME	QTY
G922L-47010	Cover, Inverter Signal Connector	1*4
91551-80618	Bolt, Flange	15*4
091X1-47020	Seal, Masking, No. 1	1*5
08887-02809	Toyota Thermal Grease X-23-7884-4	2*6

^{*1} Part numbers are subject to change. Order the correct part number by inputting the VIN in the EPC.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVi*		TSADVUNIT	1
Techstream 2.0	ADE	TS2UNIT	
Techstream Lite	ADE	TSLITEPDLR01	1
Techstream Lite (Green Cable)		TSLP2DLR01	

^{*}Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 15.00.028 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

^{*2} Refer to step 3 in this Service Bulletin to determine if the part is required.

^{*3} Required for ANY Repair Procedure in this Service Bulletin.

^{*4} NOT required. Available in case of breakage.

^{*5} Included in IPM Kit. Available if spare is needed.

^{*6} Used ONLY for IPM replacement. Part has shelf life of one year. Do NOT use if stored past one year.

Required Tools & Equipment (continued)

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Oil Seal Puller*	<u>09308-00010</u>	1
Anti-static Mat*	<u>09890-47010-01</u>	1
Squeegee*	<u>09891-47010</u>	1
Torque Wrench Adapter*	<u>09961-00950</u>	1
Inverter Case Separator*	<u>09891-47020-01</u>	1
	<u>01413-00072</u> (Medium)	
Electrical Insulating Gloves*	<u>01413-00073</u> (Large)] 1
	<u>01413-00074</u> (Extra Large)]

^{*}Essential SST.

CAUTION

ALWAYS inspect electrical insulating gloves before use for cracks, ruptures, tears, pinholes, or damage. Do NOT wear if damaged.

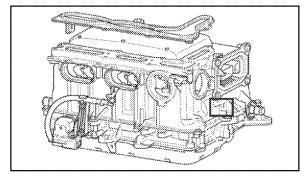
NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

Repair Procedure

- 1. Confirm the condition exists.
 - A. Are DTCs P0A94, P324E, P0A1A, and/or P3004 stored?
 - YES Continue to sub step B.
 - NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - B. Does the vehicle exhibit physical damage to the inverter assembly with converter in the location shown?
 - YES Continue to step 2.
 - NO Go to step 3.

Figure 1.



Page 4 of 7

Page 5 of 7

MIL ON With DTCs P0A94, P324E, P0A1A, and/or P3004

Repair Procedure (continued)

(P) TOYOTA

2. Replace the inverter assembly with converter.

Refer to TIS, applicable model and model year Repair Manual:

• 2010 Prius:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2011 Prius:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

• 2012 Prius:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

• 2013 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2014 Prius:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2015 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2012 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2013 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2014 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

2015 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

• 2016 – 2017 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Inverter With Converter: Removal / Installation"

A. The repair is now complete. Clear ANY DTCs and confirm the condition is no longer present.



Repair Procedure (continued)

3. Determine the correct components to replace based on the inverter assembly with converter type, DTC, and information code.

Refer to TIS, applicable model and model year Repair Manual:

• 2010 / 2011 / 2012 / 2013 / 2014 / 2015 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Hybrid Control System: DTC Check / Clear"

• <u>2012</u> / <u>2013</u> / <u>2014</u> / <u>2015</u> / <u>2016</u> / <u>2017</u> Prius V:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Hybrid Control System: DTC Check / Clear"

4. Repair the inverter assembly with converter.

NOTE

- ALL repairs in this Service Bulletin require super long life coolant, an inverter drain plug kit, and a gasket.
- Toyota thermal grease is ONLY used for IPM replacement. This part has a shelf life of one year. Do NOT use if stored past one year.
- Reference the <u>Quick Training Guide</u> for best practices for 2010 2015 model year Prius and 2012 – 2017 model year Prius V vehicles.

Refer to TIS, applicable model and model year Repair Manual:

2010 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Power Module Intelligent Transistor: Removal / Installation"

• 2011 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Power Module Intelligent Transistor: Removal / Installation"

2012 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Power Module Intelligent Transistor: Removal / Installation"

2013 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Power Module Intelligent Transistor: Removal / Installation"

• 2014 Prius:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid / Battery Control: Power Module Intelligent Transistor: Removal / Installation"

Repair Procedure (continued)

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2015 Prius:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Power Module Intelligent Transistor: Removal / Installation"

• 2012 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Power Module Intelligent Transistor: Disassembly / Reassembly"

• 2013 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Power Module Intelligent Transistor: Disassembly / Reassembly"

• 2014 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Power Module Intelligent Transistor: Disassembly / Reassembly"

2015 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Power Module Intelligent Transistor: Disassembly / Reassembly"

• 2016 – 2017 Prius V:

Engine/Hybrid System - Hybrid/Battery Control System - "Hybrid / Battery Control: Power Module Intelligent Transistor: Disassembly / Reassembly"

5. Clear ANY DTCs and confirm the condition is no longer present.